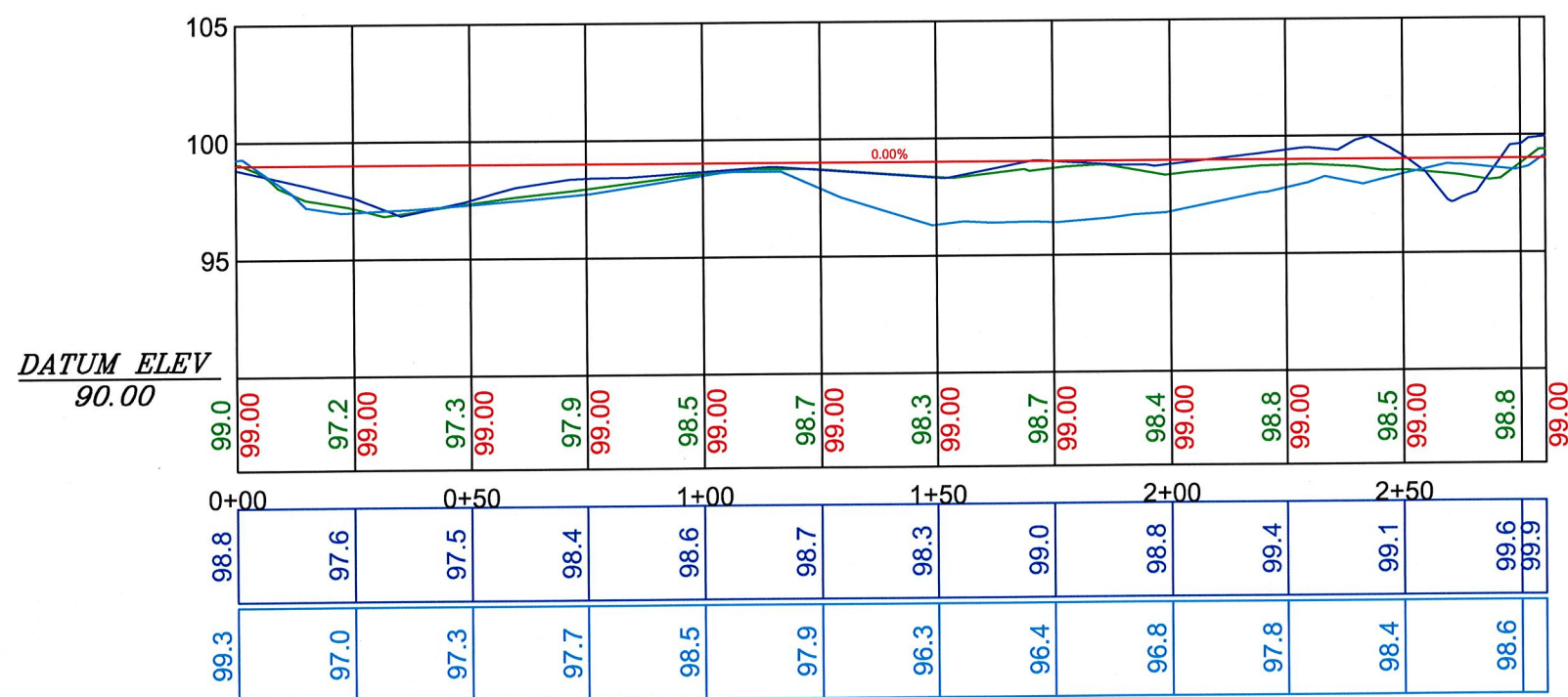


LEGEND	
	MAJOR CONTOUR (5 FOOT INTERVAL)
	MINOR CONTOUR (1 FOOT INTERVAL)
	ROADS AND PARKING- EXISTING
	ROADS AND PARKING- NEW
	TOP OF BANK
	GRADE AND GRAVEL
	NEW ROAD
	WATERLINE
	COTTON WOOD TREE
	PICNIC TABLE
	CONCRETE PARKING PAD
	CONTROL POINT
	FENCE
	BARRIER ROCK
	SIGN
	REVEGETATED AREA
	PARKING BLOCK



PROFILE LEGEND	
	FINISH GRADE - CENTERLINE
	EXISTING GRADE - CENTERLINE
	EXISTING GRADE - 8' LEFT OF CENTERLINE
	EXISTING GRADE - 8' RIGHT OF CENTERLINE

J. Kevin McDonnell 4.2015
 DRAWN BY: DATE:
 CHECKED BY: DATE:

REVISED BY: DATE:
 APPROVED BY: DATE:

APPROVED BY: DATE:
 APPROVED BY: DATE:

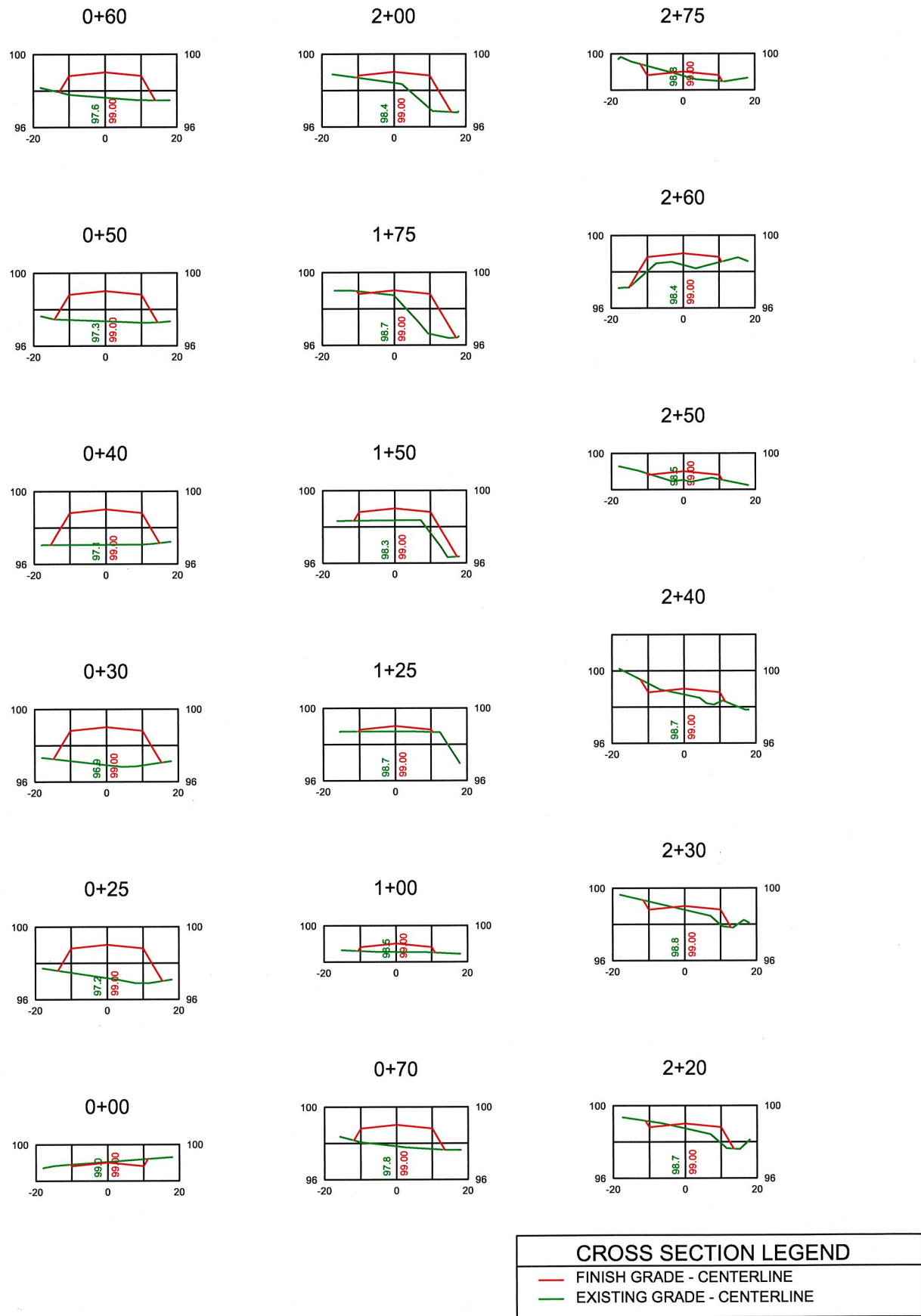


**Montana Fish,
Wildlife & Parks**

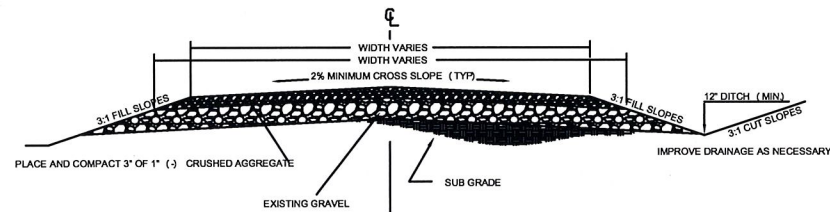
NEW ROAD PROFILE
 Emigrant FAS near Emigrant, MT



SHEET: 4
of 6

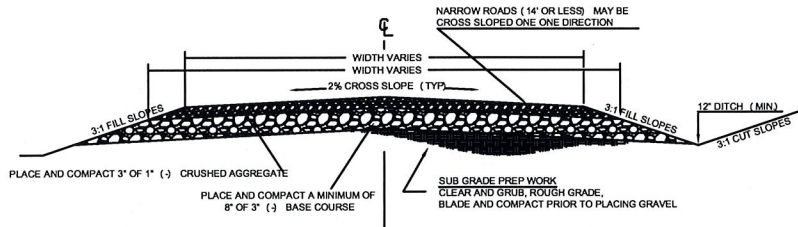


STATION	AREAS Square Feet		VOLUMES Cubic Yards		CUMULATIVE VOLUMES Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
0+00	3.14	0.00				
0+25	0.00	42.45	1.45	19.65	1.45	19.65
0+30	0.00	48.14	0.00	8.15	1.45	27.81
0+40	0.00	45.95	0.00	17.31	1.45	45.11
0+50	0.00	37.46	0.00	15.38	1.45	60.49
0+60	0.00	29.89	0.00	12.24	1.45	72.73
0+70	0.00	23.92	0.00	9.66	1.45	82.39
1+00	0.00	7.35	0.00	17.37	1.45	99.76
1+25	0.00	4.07	0.00	5.29	1.45	105.04
1+50	0.00	18.28	0.00	10.35	1.45	115.39
1+75	0.32	21.77	0.15	18.54	1.60	133.93
2+00	0.00	20.25	0.15	19.45	1.75	153.39
2+20	1.22	6.88	0.45	10.05	2.20	163.43
2+30	1.93	5.61	0.76	1.73	2.97	165.16
2+40	1.58	6.35	0.86	1.73	3.83	166.89
2+50	0.05	6.78	0.41	2.17	4.24	169.06
2+60	0.00	12.78	0.01	3.66	4.25	172.73
2+75	2.26	3.70	0.63	4.58	4.88	177.30
			0.00	0.00	4.88	177.30



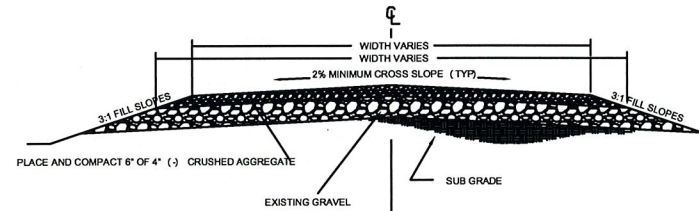
- NOTES:
1. BLADE THE EXISTING ROAD MATERIAL TO DEPTH SUFFICIENT TO REMOVE POTHoles, WASHBOARDS, RESTORE CROSS SLOPES AND UNIFORM GRADES.
 2. IMPROVE THE DRAINAGE DITCHES ADJACENT TO ROADS AS NECESSARY.
 3. COMPACT EXISTING GRAVEL SURFACE PRIOR TO PLACING NEW CRUSHED GRAVEL SURFACE.
 4. PLACE AND COMPACT 3" OF 1" (-) CRUSHED TOP SURFACING
 5. NARROW ROADS (LESS THAN 14') MAY BE CROSS SLOPED IN ONE DIRECTION.

TYPICAL SECTION A : GRADE AND GRAVEL EXISTING ROADS AND PARKING AREAS
NOT TO SCALE



- NOTES:
1. CLEAR AND GRUB AREAS DESIGNATED FOR NEW ROADS AND CAMPING. TOP SOIL DEPTH IS VARIABLE.
 2. RETAIN STRIPPED TOP SOIL FOR USE ON BOAT RAMP CUT SLOPE OR PLACE IN AREA DESIGNATED BY FWP ENGINEER.
 3. COMPACT EXISTING ROUGH GRADED SURFACE PRIOR TO PLACING NEW GRAVEL BASE COURSE.
 4. PLACE AND COMPACT 8" OF 3" (-) BASE COURSE.
 5. PLACE AND COMPACT 3" OF 1" (-) CRUSHED TOP SURFACING ON BASE COURSE.
 6. NARROW ROADS (LESS THAN 14') MAY BE CROSS SLOPED IN ONE DIRECTION.

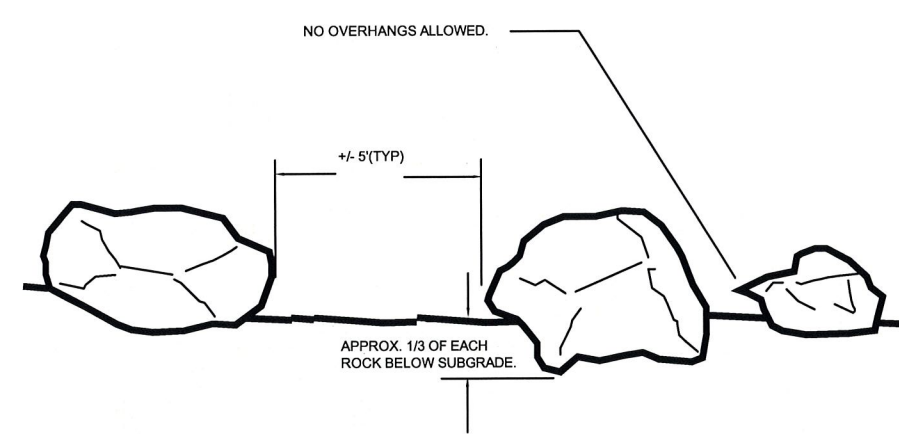
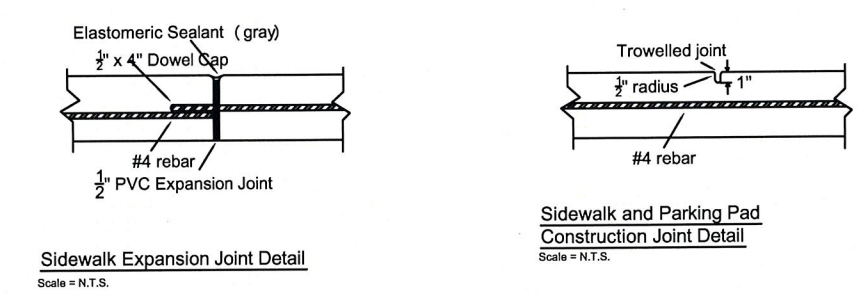
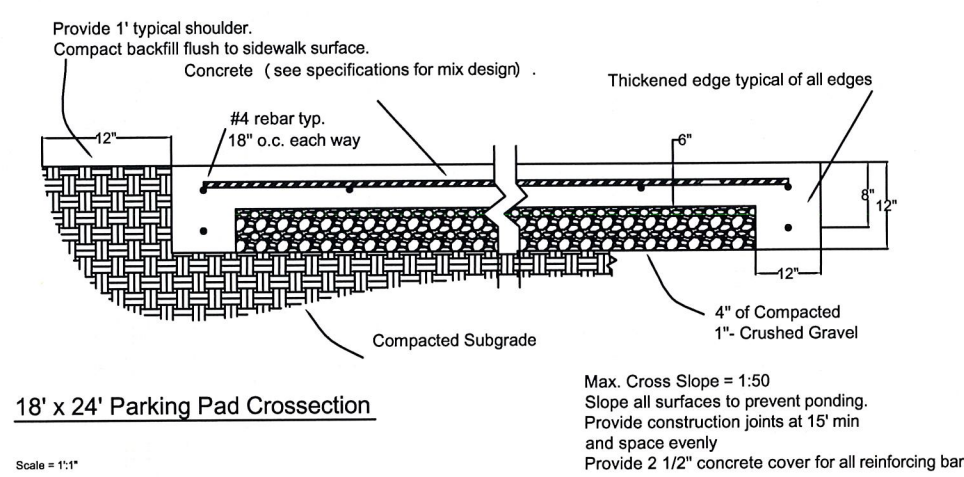
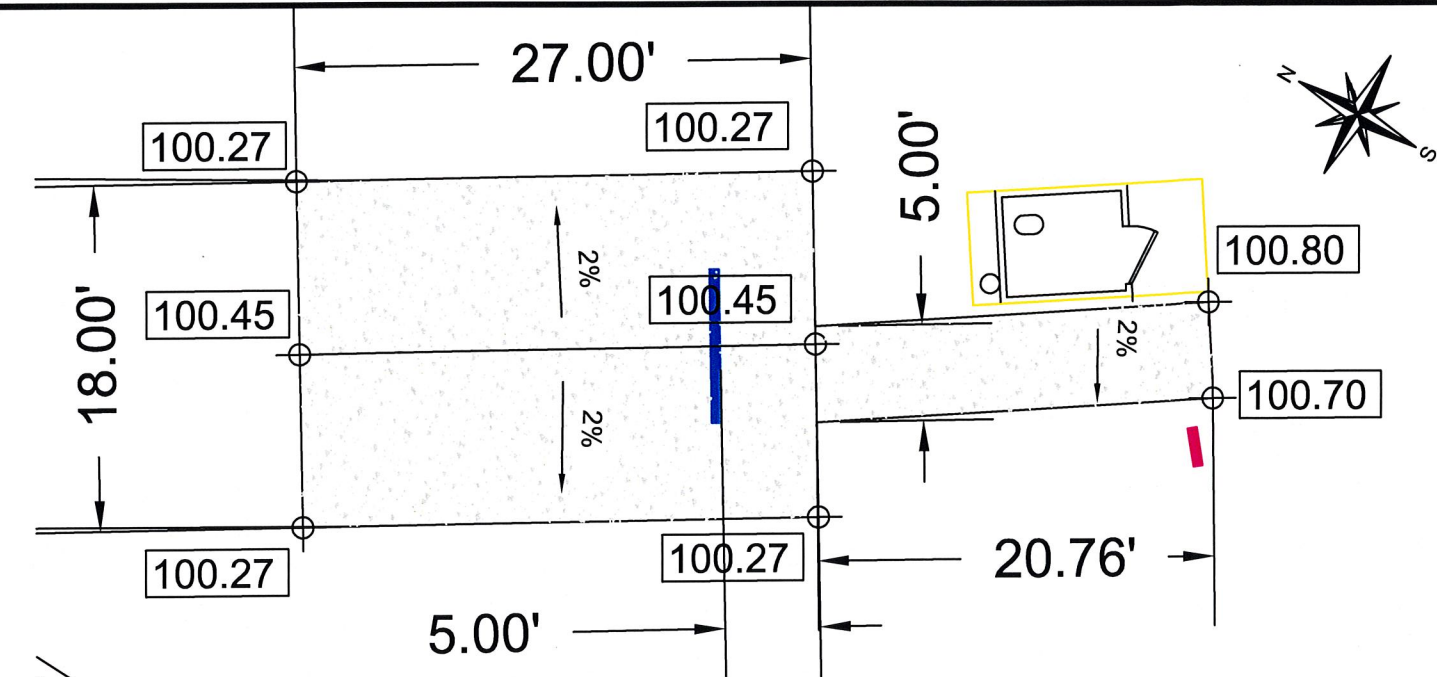
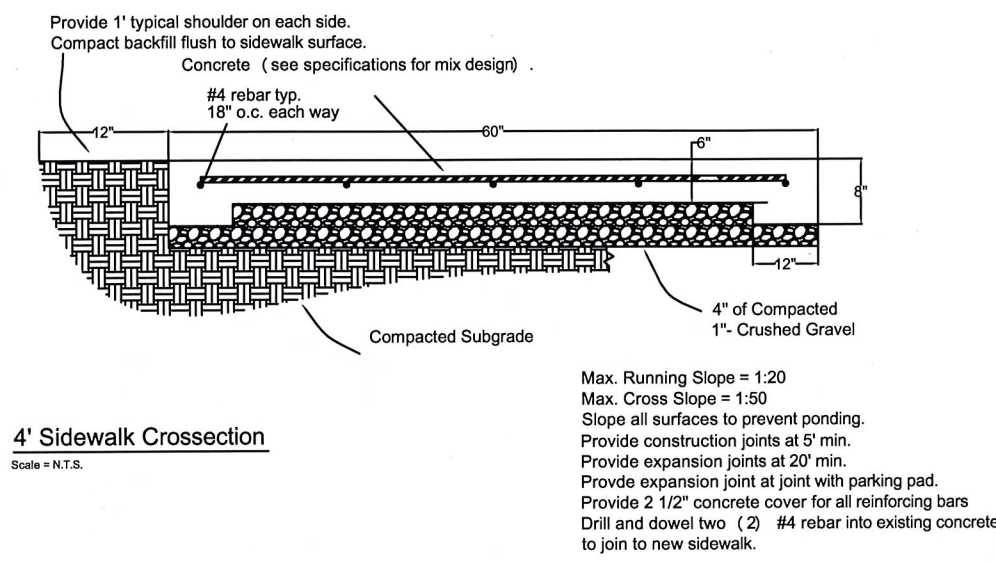
TYPICAL SECTION B : NEW ROAD
NOT TO SCALE



- NOTES:
1. BLADE THE EXISTING RAMP MATERIAL TO DEPTH SUFFICIENT TO REMOVE POTHoles, WASHBOARDS, RESTORE CROSS SLOPES AND UNIFORM GRADES.
 2. COMPACT EXISTING GRAVEL SURFACE PRIOR TO PLACING NEW CRUSHED GRAVEL SURFACE.
 3. PLACE AND COMPACT 6" OF 4" (-) CRUSHED TOP SURFACING
 4. RAMPS MAY BE CROSS SLOPED IN ONE DIRECTION.

TYPICAL SECTION C : GRADE AND GRAVEL EXISTING BOAT RAMPS
NOT TO SCALE





- BARRIER ROCK NOTES:**
- 1) LANDSCAPE & BARRIER ROCK WILL BE PLACED AS SHOWN ON PLANS OR AS DESIGNATED BY FWP ENGINEER.
 - 2) MINIMUM SIZE SHALL BE 6 CF. NO DIMENSION SHALL BE LESS THAN 1/3 OF THE LONGEST DIMENSION.
 - 3) ROCK SHALL BE HARD, DURABLE WITH NO MAJOR MACHINE MARKS OR BLEMISHES. SUBMIT THE SOURCE INFORMATION TO THE FWP ENGINEER (5) DAYS PRIOR TO INSTALLATION.
 - 4) BARRIER ROCKS SHALL BE SET SO THAT THEIR LONG AXIS IS PARALLEL TO THE GROUND AND ROAD SURFACING. THERE SHALL BE NO ACUTE ANGLES AT THE GROUND LINE.
 - 5) APPROXIMATELY 1/3 OF EACH ROCK SHALL BE PLACED BELOW GRADE.
 - 6) UNLESS OTHERWISE DIRECTED BARRIERS SHALL BE PLACED APPROXIMATELY 5' APART FROM EDGE TO EDGE.
 - 7) THE PROPER FINISHED GRADE WILL BE ESTABLISHED AROUND EACH ROCK.